▦ US SPORTS BETTING PLATFORM

PRODUCT DOCUMENT

Fixed-Odds Sports Betting Platform for Dominican Republic

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Prepared By: IT Logix India Private Limited
Version: 2.0

📄 EXECUTIVE SUMMARY

This document outlines a comprehensive **production-ready, enterprise-grade sports betting platform** designed for the Dominican Republic market. The platform offers secure wallet payments, real-time odds integration, KYC compliance, and a complete admin dashboard for operations management.

The platform will provide a professional, Hard Rock-inspired betting experience with full regulatory compliance, mobile-first design, and scalable architecture supporting thousands of concurrent users.

🎯 PRODUCT OVERVIEW

Platform Type

Fixed-odds sports betting platform (user bets against the house)

Target Market

Dominican Republic - Licensed Sports Betting Operations

Core Value Proposition

- Premium, casino-quality betting interface
- Real-time odds and live betting capabilities
- Secure wallet-based payment system
- KYC and responsible gaming compliance
- Comprehensive admin dashboard
- Mobile-first design (70%+ traffic on mobile)

⚒ TECHNICAL ARCHITECTURE

Frontend Technology Stack

Technology	Version	Purpose
Angular	18	Modern UI framework
TypeScript	5+	Type-safe development
Angular Material	Latest	UI component library
RxJS	Latest	Reactive programming
NgRx	Latest	State management

Key Features:

- Component-based architecture
- Dependency injection
- Reactive forms
- Lazy loading modules
- Progressive Web App (PWA) capabilities
- Server-Side Rendering (SSR) for SEO
- Offline functionality
- Push notifications

Mobile Applications

Technology	Version	Purpose
Flutter	Latest	Cross-platform mobile development
Dart	Latest	Programming language
Provider/Bloc	Latest	State management

Key Features:

- Native iOS and Android apps
- Single codebase for both platforms
- High performance and native UI
- Offline functionality
- Push notifications
- Biometric authentication
- Mobile-specific features

Backend Technology Stack

Technology	Version	Purpose
ASP.NET Core	Latest	Web API framework
Dapper	Latest	Lightweight ORM
MySQL	8.0+	Production database
JWT	Latest	Authentication
SignalR	Latest	Real-time communication

Key Features:

- RESTful API architecture
- High performance data access
- Scalable architecture
- Security-first design
- Real-time communication support
- Microservices-ready structure
- Horizontal scalability
- Load balancing support

Infrastructure & Hosting

Service	Purpose
AWS / Azure	Cloud hosting
Docker	Containerization
CI/CD Pipeline	Automated deployment
CloudFlare	CDN & DDoS protection
SSL/TLS	End-to-end encryption
Monitoring	Application performance monitoring

Performance Targets:

- Page load time: < 2 seconds
- API response time: < 200ms
- 99.9% uptime SLA
- Support for 10,000+ concurrent users
- Auto-scaling capabilities

Third-Party Integrations

- **Odds API** - Real-time sports odds and data
- **Payment Gateway** - Secure payment processing (Stripe, PayPal, Braintree)
- **KYC Services** - Know Your Customer verification
- **Email Service** - SendGrid, Mailgun
- **SMS Service** - Twilio
- **Push Notifications** - Firebase, OneSignal
- **Analytics** - Google Analytics, Mixpanel

❖ CORE MODULES & FEATURES

1. Authentication & Registration Module

Registration Features

- Email verification (double opt-in)
- Phone number verification (SMS OTP)
- Two-factor authentication (2FA) support
- Social media login integration (Google, Facebook)
- KYC (Know Your Customer) compliance workflow
- Age verification (18+)
- Geolocation verification for regulatory compliance
- Account activation workflow

User Authentication

- Secure login with JWT tokens
- Password reset functionality
- Session management
- Multi-device login support
- Remember me functionality
- Account lockout after failed attempts
- IP-based security monitoring

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2. KYC Verification Module

KYC Workflow

- Document upload (ID, Proof of Address)
- Identity verification
- Address verification
- Age verification
- Automated document scanning
- Manual review queue for admins

- KYC status tracking
- Verification notifications
- Compliance reporting

Compliance Features

- Anti-money laundering (AML) checks
- Watchlist screening
- Risk scoring
- Regulatory compliance tracking
- Audit trail maintenance

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3. Wallet System Module

Deposit Features

- Multiple deposit methods:
  - Credit/Debit cards (Visa, Mastercard, Amex)
  - E-wallets (PayPal, Skrill, Neteller)
  - Bank transfers
  - Cryptocurrency (optional)
  - Prepaid cards

- Minimum/maximum deposit limits
- Deposit bonus system
- Deposit history tracking
- Instant deposit processing
- Deposit confirmation notifications

Withdrawal Features

- Multiple withdrawal methods:
  - Bank transfer (ACH, Wire)
  - E-wallet transfers
  - Check processing
  - Same-day processing options

- Withdrawal request workflow
- Admin approval system
- Withdrawal limits (daily, weekly, monthly)
- Withdrawal history
- Processing time tracking

Wallet Management

- Account balance display
- Transaction history
- Pending transactions
- Wallet statement export
- Currency management
- Bonus wallet separation
- Cashback system

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4. Sports Listing & Odds Module

Sports Coverage

League	Coverage	Markets
NFL	Full season	Moneyline, Spread, Totals, Props
NBA	Full season	Moneyline, Spread, Totals, Player Props
MLB	Full season	Moneyline, Run Line, Totals, Player Props
NHL	Full season	Moneyline, Puck Line, Totals
NCAA Football	Full season	Moneyline, Spread, Totals
NCAA Basketball	Full season	Moneyline, Spread, Totals
Soccer	Major leagues	Match Result, Over/Under, Both Teams to Score
Tennis	ATP/WTA Tours	Match Winner, Set Betting
Golf	PGA Tour	Tournament Winner, Top Finishers
UFC/Boxing	Major events	Fight Winner, Method, Round

Odds Features

- Real-time odds updates
- Multiple odds providers integration
- Odds comparison
- Odds history tracking
- Favorite/underdog identification
- Spread and totals display
- Player props odds
- Live odds refresh (every 30 seconds)

Sports Navigation

- Sport category browsing
- League filtering
- Event search functionality
- Favorite teams/leagues
- Upcoming events calendar
- Live events indicator
- Results and statistics

5. Bet Placement & Settlement Module

Bet Types Supported

Single Bets:

- Moneyline (straight win)
- Point Spread
- Totals (Over/Under)
- Player Props
- Team Props

Multiple Selection Bets:

- Parlay bets (2+ selections)
- Round Robin bets
- Teaser bets
- If Bets
- Reverse bets

Specialty Bets:

- Live/In-Play betting
- Futures bets (season-long)
- Proposition bets
- Same-game parlays
- Cash-out bets

Bet Placement Features

- Bet slip interface
- Stakes calculator
- Payout calculator
- Quick bet options
- Bet builder interface
- Bet confirmation
- Minimum/maximum stake validation
- Available balance check
- Odds change warnings
- Bet placement confirmation

Bet Management

- Active bets tracking
- Bet history
- Cash-out functionality (live bets)
- Bet settlement
- Pending bets
- Void bets handling
- Bet cancellation (where applicable)
- Bet modification (partial cash-out)

6. Live Betting (In-Play) Module

Live Betting Features

- Real-time game updates
- Live odds refresh (every 10-30 seconds)
- Cash-out options during games
- Live statistics integration
- Game visualization
- Play-by-play updates
- Score updates
- Time remaining display
- In-play markets
- Live stream integration (if available)

Live Markets

- Next team to score
- Next goal scorer
- Over/Under live
- Handicap live
- Match winner (live)
- Player performance props (live)

7. Admin Console Module

User Management

- User accounts administration
- User search and filtering
- Account verification management
- Suspension/ban management
- Credit adjustments
- Account status changes
- User activity monitoring
- Login history
- IP address tracking
- User communication tools

Betting Management

- Active bets monitoring
- Bet history review
- Odds management
- Manual odds adjustment
- Payout processing
- Bet settlement (manual override)
- Dispute resolution
- Void/cancel bets
- Bet slip review

Financial Management

- Deposit processing and approval
- Withdrawal processing and approval
- Transaction reports
- Financial analytics dashboard
- Revenue tracking
- P&L reports
- Daily/weekly/monthly summaries
- Transaction filtering and search
- Export to Excel/CSV
- Payment method management

Sports Data Management

- Odds provider integration management
- Event scheduling
- Market management
- Result verification and posting
- Manual result entry
- Event cancellation handling
- Sports/league management
- Market template management

Analytics & Reporting

- User activity reports
- Betting volume reports
- Revenue reports
- Performance metrics
- Custom report generation
- Real-time dashboard
- Trend analysis
- User segmentation
- Retention reports
- Conversion funnel analysis

📱 MOBILE APPLICATION FEATURES

Progressive Web App (PWA)

- Installable on iOS and Android
- App-like experience without app store
- Offline functionality
- Push notifications
- Home screen icon
- Fast loading times
- Responsive design
- Touch-optimized interface

Native Mobile Apps (Flutter)

- **iOS App (App Store)**
  - Native iOS design
  - Apple Pay integration
  - Face ID/Touch ID authentication
  - iOS-specific features

- **Android App (Google Play)**

- Material Design
- Google Pay integration
- Fingerprint authentication
- Android-specific features

Mobile Features:

- Quick bet placement
- Mobile wallet
- Biometric login
- Push notifications for:

    - Bet confirmations
    - Odds changes
    - Deposit/withdrawal status
    - Promotional offers
    - Match updates

🔒 SECURITY & COMPLIANCE

Security Features

Data Security

- SSL/TLS encryption (end-to-end)
- Encrypted database storage
- Secure password policies
- Password hashing (bcrypt)
- JWT token-based authentication
- Session management
- Secure API endpoints
- Rate limiting
- IP whitelisting (admin)

Application Security

- SQL injection prevention
- XSS (Cross-Site Scripting) protection
- CSRF (Cross-Site Request Forgery) protection
- DDoS protection (CloudFlare)
- Input validation and sanitization
- Secure file uploads
- API authentication and authorization
- Security headers

Payment Security

- PCI DSS compliance
- Tokenized payment storage
- Fraud detection system
- Transaction monitoring
- Encrypted data transmission
- Payment gateway security
- Secure checkout process

Compliance Requirements

Regulatory Compliance

- GDPR compliance (if applicable)
- CCPA compliance (if applicable)
- Age verification (18+)
- Geolocation restrictions
- Responsible gambling compliance
- Anti-money laundering (AML)
- KYC requirements
- Data protection standards
- Regulatory reporting

Responsible Gambling

- Deposit limits (daily, weekly, monthly)
- Loss limits
- Wager limits
- Time-out options
- Self-exclusion tools
- Reality checks
- Support resources integration
- Problem gambling warnings
- Limit modification requests

🗔 USER FLOW SUMMARY

1. User Registration Flow

1. User visits platform
2. Clicks "Register" or "Sign Up"
3. Provides email and phone number
4. Verifies email via confirmation link
5. Verifies phone via SMS OTP
6. Completes KYC verification (ID upload)
7. Account activated upon KYC approval
8. User can deposit and start betting

2. Deposit & Wallet Flow

1. User logs in
2. Navigates to "Deposit" or "Wallet"
3. Selects deposit method
4. Enters amount and payment details
5. Confirms deposit
6. Funds credited to wallet (instant or pending)
7. Deposit confirmation notification
8. Balance updated

3. Bet Placement Flow

1. User browses sports/events
2. Selects event and market
3. Chooses bet type (Moneyline, Spread, etc.)
4. Adds to bet slip
5. Enters stake amount
6. Reviews bet details
7. Confirms bet
8. Bet placed confirmation
9. Funds deducted from wallet
10. Active bet appears in "My Bets"

4. Live Betting Flow

1. User navigates to "Live" section
2. Views live events and current scores
3. Selects live market
4. Reviews live odds (refreshes frequently)
5. Adds to bet slip
6. Places live bet
7. Can cash out at any time during event
8. Bet settles when event ends

5. Withdrawal Flow

1. User navigates to "Withdraw"
2. Selects withdrawal method
3. Enters withdrawal amount
4. Verifies balance and limits
5. Submits withdrawal request
6. Request pending admin approval
7. Admin reviews and approves/rejects
8. Funds processed
9. User receives confirmation
10. Funds arrive (varies by method)

6. Bet Settlement Flow

1. Event/match concludes
2. Results verified via API or manual entry
3. System automatically settles bets
4. Winning bets credited to wallet
5. Losing bets marked as lost
6. Push/void bets handled appropriately
7. Users notified of bet results
8. Wallet balance updated

🎨 DESIGN & USER EXPERIENCE

Brand Identity

- Custom logo design
- Brand color scheme
- Typography selection
- Icon library
- Visual style guide
- Hard Rock-inspired premium aesthetic

User Interface

- Modern, clean design

- Intuitive navigation
- Fast loading times (< 2 seconds)
- Smooth animations
- Responsive across all devices
- Dark mode support (optional)
- Customizable themes

User Experience

- User journey optimization
- A/B testing capabilities
- Conversion optimization
- Accessibility (WCAG 2.1 AA)
- Multi-language support (Spanish/English for Dominican Republic)
- Onboarding tutorials
- Help center and FAQs
- Live chat support

🗂 INTEGRATIONS DETAILS

Sports Data Providers

The Odds API (Primary)

- Real-time odds
- Event schedules
- Results and scores
- Statistics
- Multiple bookmaker odds aggregation

Sportradar (Backup)

- Backup odds provider
- Statistical data
- Match information
- Injury reports

Betfair Exchange (Optional)

- Exchange odds
- Market information

Payment Gateways

Stripe

- Credit/debit card processing
- International cards support
- Recurring payments
- Fraud detection

PayPal

- PayPal account payments
- One-click payments
- International support

Braintree

- PayPal integration
- Credit card processing
- Multiple payment methods

Third-Party Services

Email Service

- **SendGrid / Mailgun**
  - Transactional emails
  - Marketing emails
  - Email templates
  - Email analytics

SMS Service

- **Twilio**
  - SMS OTP verification
  - Transactional SMS
  - Marketing SMS (opt-in)

Push Notifications

- **Firebase / OneSignal**

- Web push notifications
- Mobile push notifications
- Notification scheduling
- Segmentation

Analytics

- **Google Analytics**

  - User behavior tracking
  - Conversion tracking
  - Event tracking

- **Mixpanel**

  - User analytics
  - Funnel analysis
  - Cohort analysis

Customer Support

- **Zendesk / Intercom**

  - Help desk
  - Live chat
  - Knowledge base
  - Ticket management

▦ REPORTING & ANALYTICS

User Analytics

- Registration trends
- Active user counts
- User retention rates
- User lifetime value
- Geographic distribution
- Device/OS breakdown

Betting Analytics

- Total bets placed
- Average bet size
- Popular sports/leagues
- Popular bet types
- Win/loss ratio
- Revenue per user

Financial Analytics

- Total deposits
- Total withdrawals
- Net revenue
- Profit margins
- Transaction volume
- Payment method breakdown

Operational Reports

- Daily/weekly/monthly summaries
- Performance metrics
- System health monitoring
- Error rates
- API response times

🚀 DEPLOYMENT & INFRASTRUCTURE

Hosting Platform

- **AWS (Amazon Web Services)** or **Azure**
- Auto-scaling capabilities
- Load balancing
- High availability setup
- Multi-region deployment (optional)

Database

- **Managed MySQL 8.0+**
- Automated backups (daily)
- 30-day backup retention
- Read replicas for scalability
- Database optimization

Content Delivery

- **CloudFlare CDN**

- Global content delivery
- DDoS protection
- SSL certificates
- Caching optimization

Monitoring

- **Datadog / New Relic**
- Application performance monitoring
- Error tracking
- Uptime monitoring
- Alert system

Infrastructure Costs (Monthly)

- Cloud Hosting: $400 - $800
- Database: $150 - $300
- CDN: $20 - $200
- Monitoring: $50 - $150
- SSL Certificates: $10 - $50
- Backup Storage: $20 - $50
- **Total: $650 - $1,550/month**

☑ PROJECT DELIVERABLES

Technical Deliverables

1. Compiled production application (deployed)
2. Production-ready database schema
3. API documentation
4. Deployment scripts & configuration
5. Docker containerization
6. CI/CD pipeline setup
7. Security audit report
8. Performance optimization report
9. System documentation
10. Database documentation

User Deliverables

1. Live production website (Angular 18)
2. Admin dashboard access
3. Native mobile apps (Flutter - iOS & Android)
4. User accounts for testing
5. Complete user documentation

Business Deliverables

1. Project documentation
2. Maintenance guide
3. Scalability roadmap
4. Future enhancement recommendations
5. Compliance documentation
6. Security certificates
7. Performance benchmarks

📋 PROJECT TIMELINE

Project Duration: 8-10 months (starting November 2025)

Phase	Duration	Deliverables
Phase 1: Planning & Design	1 month	Wireframes, Design mockups, Technical architecture
Phase 2: Core Development	2-3 months	Backend API, Database, Authentication system
Phase 3: Frontend Development	2 months	Angular application, User interfaces, Mobile optimization
Phase 4: Integrations	1 month	Payment gateways, Sports data APIs, Third-party services
Phase 5: Testing & QA	1 month	Bug fixes, Performance optimization, Security testing
Phase 6: Deployment	1 month	Production deployment, Monitoring setup, Documentation
TOTAL	**8-10 months**	**Production-ready platform**

⏱ COST ESTIMATION

Total Project Cost: $70,000 - $90,000

Development Breakdown

Component	Estimated Cost
Backend Development	$30,000 - $40,000
Frontend Development	$25,000 - $35,000
Integration & Testing	$8,000 - $10,000
Design & Branding	$5,000 - $7,000
Deployment & Setup	$2,000 - $3,000

TOTAL PROJECT COST $70,000 - $90,000

📄 SOURCE CODE & LICENSING

The project will be deployed in compiled form. Source code will not be provided as part of this contract. Maintenance, updates, or enhancements beyond the agreed scope will be charged separately.

🔧 SUPPORT & MAINTENANCE

Included (1 Month Post-Deployment)

- Bug fixes and patches
- Small micro changes
- Technical support

Ongoing Support & Maintenance

Monthly Support Package: $2,500/month

Included Services:

- Bug fixes and patches
- Security updates and patches
- Performance monitoring
- Server maintenance
- Backup management
- Basic feature adjustments
- Email and phone support (business hours)
- Monthly status reports
- Database optimization
- Uptime monitoring

✉ CONTACT INFORMATION

Prepared By: IT Logix India Private Limited

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Date: November 1, 2025
Status: Product Specification - Ready for Development

This product document represents a comprehensive production-ready sports betting platform for the Dominican Republic market. All features, modules, and functionalities are subject to regulatory approval and compliance requirements.